



SBIRs

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9 October 1997

Agenda

- **Review SBIR process**
- **Discuss SBIR Proprietary Data Rights**
- **Overview of topics and submissions**

Solicitation Process

Pre-Solicitation Period 20 March - 30 April

New Topics - 7 OSD

available through DoD Home Page

<http://www.acq.osd.mil/sadbu/sbir>

Solicitation Period 1 May - 16 July

Hard copy 1(800) DOD-SBIR

Electronic at <http://www.dtic.dla.mil/dtic/sbir>

Proposal Evaluation 17 July - 18 Aug

Source Selection Authority announcement 5 Sep

Contract Awards 30 Sep

SBIR Program

- **“encourage ... scientific and technical approaches most likely to yield results important to DoD and the private sector”**
- **PL 97-219, PL 99-443 and PL 102-546.**
- **DoD’s Program Small Business Administration (SBA) SBIR Policy Directive, January 1993.**

Phase I

- **purpose**: to determine scientific, technical and commercial merit and feasibility of an idea submitted under SBIR program
- up to \$100,000
- period of 6 months
- must respond to DoD solicitation with a Phase I proposal
- Required for continuing to Phase II

Phase II

- **purpose**: potential to yield a product or process of continuing importance to further DoD and the private sector.
- award based on results of Phase I
- up to \$750,000
- 24 months
- Expected to produce a well defined deliverable product or process.

Phase III

- **purpose**: encourage the conversion of federally sponsored research and development innovation into private sector.
- Federal agencies may award non-SBIR funded follow-on contracts.
- Non-SBIR FUNDED

SBIR Company Requirements

- **Qualified US Small Business**
- **2/3 of each Phase I must be performed by the SBIR qualified Company**
- **1/2 of each Phase II must be performed by the SBIR qualified Company**
- **Principle investigator must have primary employment at SBIR Company at time of award**

Fast Track (1)

- **Between Phase I and Phase II**
- **Benefits to Contractor/ Development**
 - interim funding \$30-50K
 - Department's highest priority for Phase II SBIR funding
 - expedited Phase II selection decision
- **Requirements**
 - Contractor must apply within 120 day CA

Fast Track (2)

- **Commitment letter from an independent 3rd party investor**
- **Matching rates function company size**
 - **<=10 employees & never had Phase II**
 - **\$0.25 per SBIR \$1.00 (\$197K)***
 - **received > =5 Phase II \$1.00 per SBIR \$1.00 (\$790K)***
 - **all others \$0.50 per SBIR \$1.00 (\$395K)***
 - *** based on SBIR funds \$790K (func proposed effort)**

Technical Data Rights (SBIR)

- **Rights ... remain with the contractor (except Government obtains royalty free license for Government Purposes) for 5 years after completion of the project**
[see Far 52.227-20, DFARS 252.227-7018]

SBIR Evaluation Criteria

- **a. The soundness and technical merit of the proposed approach and its incremental progress toward topic or subtopic solution**
- **b. The potential for commercial (government or private sector) application and the benefits expected to accrue from this commercialization**
- **c. The adequacy of the proposed effort for the fulfillment of requirements of the research topic**
- **d. The qualifications of the proposed principal/key investigators supporting staff and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.**

Schedule

Phase I

- **Fixed price negotiated 6 months**
 - **Monthly reports to COR**
 - **Briefing (tentatively March 98 - coordinate with OSD)**
 - **Final Report**

OSD97-001 HLA Federation - Implementation Tools

- **PHASE I: Explore concepts, methodologies, and design possibilities for tools to support the development of a federation baseline for either a commercial or DoD application.**
- **PHASE II: Develop and demonstrate the approach from Phase I. The product could be used by multiple simulation application manufactures to establish and develop common interactions and information transfer in an HLA federation to accomplish a specific objective (in manufacturing, analysis, simulation or design).**

OSD97-001 HLA Federation - Implementation Tools

- **S972-0018 Synetics Corporation**
- **HLA Federation Implementation Tools**
- **S972-0032 Spectra Research, Inc.**
- **HLA Federation InterConnect (FedConnect) Tool Set**
- **S972-0048 AcuSoft**
- **HLA Development Tools**
- **S972-0050 Conceptual Systems & Software**
- **Multiple Federation Management Tool Supporting Automated Exercise Management**
- **S972-0055 AEgis Research Corporation**
- **HLA Federation Implementation Tools**

OSD97-002 HLA Runtime Analysis and Monitoring Tools

- **PHASE I: Based on real time simulation requirements, design analysis and oversight tools which provide a low cost modular solution for the real time analysis and oversight of an HLA distributed federation.**
- **PHASE II: Based on either a DoD demonstration or a commercial federation implementation, prototype the analysis and oversight tools.**

OSD97-002 HLA Runtime Analysis and Monitoring Tools

- **S972-0014 SYSTRAN Corporation**
- **AgentsTools - intelligent agents for analysis and modeling**
- **S972-0015 MaK Technologies**
- **A Runtime Analysis and Monitoring Tool Suite**
- **S972-0026 Virtual Technology Corporation**
- **HLA Runtime Analysis and Monitoring Tools**

OSD97-003 HLA Commercial Applications in Simulation

- **PHASE I: Based on real-time simulation requirements, design a commercial federation (A named set of interacting common object models, and supporting RTI, that are used as a whole to achieve some specific objective).**
- **PHASE II: Prototype and demonstrate the federation.**

OSD97-003 HLA Commercial Applications in Simulation

- **S972-0017 MaK Technologies**
- **Integrating HLA into the Spearhead Game**
- **S972-0041 Perceptronics, Inc.**
- **Development of a Commercial FOM for 3D Interactive Entertainment Applications**
- **S972-0043 Software Productivity Solutions, Inc.**
- **Simulation and Analysis of Fire Evacuation (SAFE)**
- **S972-0046 Trident Systems Incorporated**
- **HLA-Enhanced Distributed Gaming Environment**

OSD97-004 Visual Representation within the HLA

- **PHASE I:** Based on real-time simulation requirements design a visual presentation either in a helmet mounted display or on a graphics workstation. Extract a synthetic environment for a small gaming area from an existing SEDRIS data base. Design a small set of typical interactions required between two ground players and two aircraft and implement the interactions using the RTI. Perform an analysis to determine the capability of the HLA infrastructure and the resulting synthetic environment to support a distributed virtual gaming environment.
- **PHASE II:** Prototype the simulation and meet real time frame rates using the synthetic environment developed from SEDRIS, air and ground players. Demonstrate the capability of the synthetic environment representation and the RTI to support dynamic changes to the environment.

OSD97-004 Visual Representation within the HLA

- **S972-0038 Cybernet Systems Corporation**
- **Commercial Game Development Using HLA and SEDRIS**
- **S972-0049 AcuSoft, Inc.**
- **Research and Development of a Synthetic Environment RTI**

OSD97-005 Stimuli (non-visual) Representation within the HLA

- **PHASE I: Identify at least one stimuli, model the stimuli in a federated object model and design an implementation which supports a real time presentation of the stimuli. The Offerors should describe the interaction which support the sensory stimulation in a virtual environment. Describe the external federate activity which causes the need for the activation of a stimuli, and the timing and effect of that stimuli on the participant.**
- **PHASE II: Build and demonstrate a prototype of the sensory stimulation system.**

OSD97-005 Stimuli (non-visual) Representation in HLA

- **S972-0006 Create Incorporated**
- **Haptic Display Software for High Level Architecture Simulations**
- **S972-0039 SYSTRAN Corporation**
- **Implementing 3-D Audio into the HLA/RTI Structure**
- **S972-0051 Mystech Associates, Inc.**
- **Representation and Transmission of Non-Visual Stimuli Using the HLA**

OSD97-006 Commercialization of Components C4I Interface to Simulation using HLA

- **PHASE I: Establish a set of C4I simulations and interfaces which have commercial value. Based on this set of applications, establish a scalable design for this simulation application.**
- **PHASE II: Prototype the design and demonstrate it in either a DoD or commercial Federation.**

OSD97-006 Commercialization of Components C4I Interface to Simulation using HLA

- **S972-0034 Lionhearth Technologies Inc.**
- **HLA-Virtual Command Post**
- **S972-0052 Mystech Associates, Inc.**
- **Commercialization of C4I Simulation Components for Disaster Planning and Recovery Using HLA**

OSD97-007 Data Management/ Analysis Tools

- **PHASE I: Design a modular data management process which will support all federation generated data. Identify approaches to increase response times.**
- **PHASE II: Prototype data management system for use on a DoD or commercial federation.**

OSD97-007 Data Management/ Analysis Tools

- **S972-0020 OptiMetrics, Inc.**
- **Data Analysis Tools for HLA Simulations**
- **S972-0025 Virtual Technology Corporation**
- **Data Management/Analysis Tools**